

CLAIMS

What is claimed is:

- 5 1. An occlusive implant delivery assembly for occluding a site in a
mammal, said assembly comprising:
 an occlusive implant having a tubular portion;
 a pusher having a distal section; and
 an extendable member coupled to said distal section of the pusher and
10 frictionally held in said tubular portion when not extended, such that during
extension of said extendable member, said implant separates from said pusher,
 said extendable member further having a plurality of ribs that extend
radially outward and engage said tubular portion when said extendable member is
not extended.
2. The assembly of claim 1, wherein said ribs further extend in a
circumferential direction.
3. The assembly of claim 2, wherein said implant comprises a coil having
20 multiple turns and selected ones of said ribs extend between selected ones of said
turns.
4. The assembly of claim 3, further including a core member positioned
inside said extendable member, said core member being sized to urge said
25 extendable member against said tubular portion.
5. The assembly of claim 3, further including a core member positioned
inside said extendable member, extension of said core member mediating
extension of said extendable member.

6. An occlusive implant delivery assembly for occluding a site in a mammal, said assembly comprising:

an occlusive implant having a tubular portion;

a pusher having a distal section;

an extendable member coupled to said distal section of the pusher and frictionally held in said tubular portion when not extended such that during extension of said extendable member, said implant separates from said pusher; and

a core member positioned within said extendable member.

7. The assembly of claim 6, wherein said core member is sized to urge said extendable member against said tubular portion.

8. The assembly of claim 6, wherein extension of said core member mediates extension of said extendable member.

9. An occlusive implant delivery assembly for occluding a site in a mammal, said assembly comprising:

an occlusive implant having a tubular portion,

a pusher having a distal section;

a retractable core member slidably disposed within said pusher and extending into said tubular portion; and

a locking member releasably coupled to the interior of said tubular portion;

where said core member is slidably engageable to said locking member;

where said pusher is engageable with said occlusive implant and allows delivery of said implant through a delivery sheath and into said site when said core member is extended and engaged with said locking member,

whereby during retraction of said core member, said locking member uncouples from said tubular portion and said implant uncouples from said pusher.

5 10. The assembly of claim 9 wherein said implant comprises a coil.

11. The assembly of claim 9 wherein said locking member comprises an elastomeric ring and said core member extends into said ring, said core member including a locking portion having a diameter that exceeds the inner diameter of
10 the ring when the ring is in a relaxed state.

12. The assembly of claim 9 wherein said core member has a proximal end portion, a distal end portion, and a stop member positioned along said distal end portion, said proximal end portion having a diameter greater than the inner
15 diameter of said ring when in a relaxed state.

13. The assembly of claim 1 wherein said tubular portion of said occlusive implant defines an interior lumen.

14. The assembly of claim 6 wherein said tubular portion of said occlusive implant defines an interior lumen.
20

15. The assembly of claim 9 wherein said tubular portion of said occlusive implant defines an interior lumen.
25

16. An occlusive implant delivery assembly for occluding a site in a mammal, said assembly comprising:
an occlusive implant having a tubular portion defining an interior lumen,
and
30 a pusher having a radially expandable distal section,

wherein said distal section of said pusher is engageable with said lumen of said implant.

17. The assembly of claim 16 wherein said implant is a coil.

18. A method for delivering an occlusive implant comprising the steps of:

a. introducing an assembly comprising

i. an occlusive implant,

ii. a pusher having a distal section, and

iii. an extendable member coupled to said distal section of the pusher for separating said implant from said pusher,

into a mammalian lumen, and

b. delivering the occlusive implant to a selected site by extending said member so to separate said implant from said pusher.

19. The method of claim 18 wherein the extendable member is an inflatable balloon and said delivery of said occlusive implant to a selected site is accomplished by inflating said balloon so to separate said implant from said pusher.

20. The method of claim 18 wherein said assembly additionally comprises a core member that extends within said extendable member.